



# Externally Piloted

## For Steam Service

This type of PRV incorporates two valves - a pilot and a main valve - in one unit. The pilot valve has a design similar to the direct acting valve. The discharge from the pilot valve acts on a set of double diaphragms, which controls through a piston the opening of the main valve. This increased diaphragm area can open a larger main valve, allowing a greater capacity per line size than the internally piloted piston-operated valve.

In addition, the diaphragms are more sensitive to pressure changes, which results in accuracy of  $\pm 1\%$ . This greater accuracy is due also to the positioning of the sensing line downstream, where there is less turbulence. This valve also offers the flexibility to use different types of pilot valves: pressure, temperature, air loaded, solenoid or combination.

Pressure and Temperature Controls

Interchangeable springs - regardless of valve size - means more flexibility in applications.

Enclosed spring chamber eliminates dirt fouling.

Dual stainless steel diaphragms provide corrosion resistance.

All cast mating parts are male and female to reduce the chance of leaks at gasket surfaces and assure proper alignment.

Ductile iron body provides a wider range of applications than cast iron and offers a less costly option to cast steel.

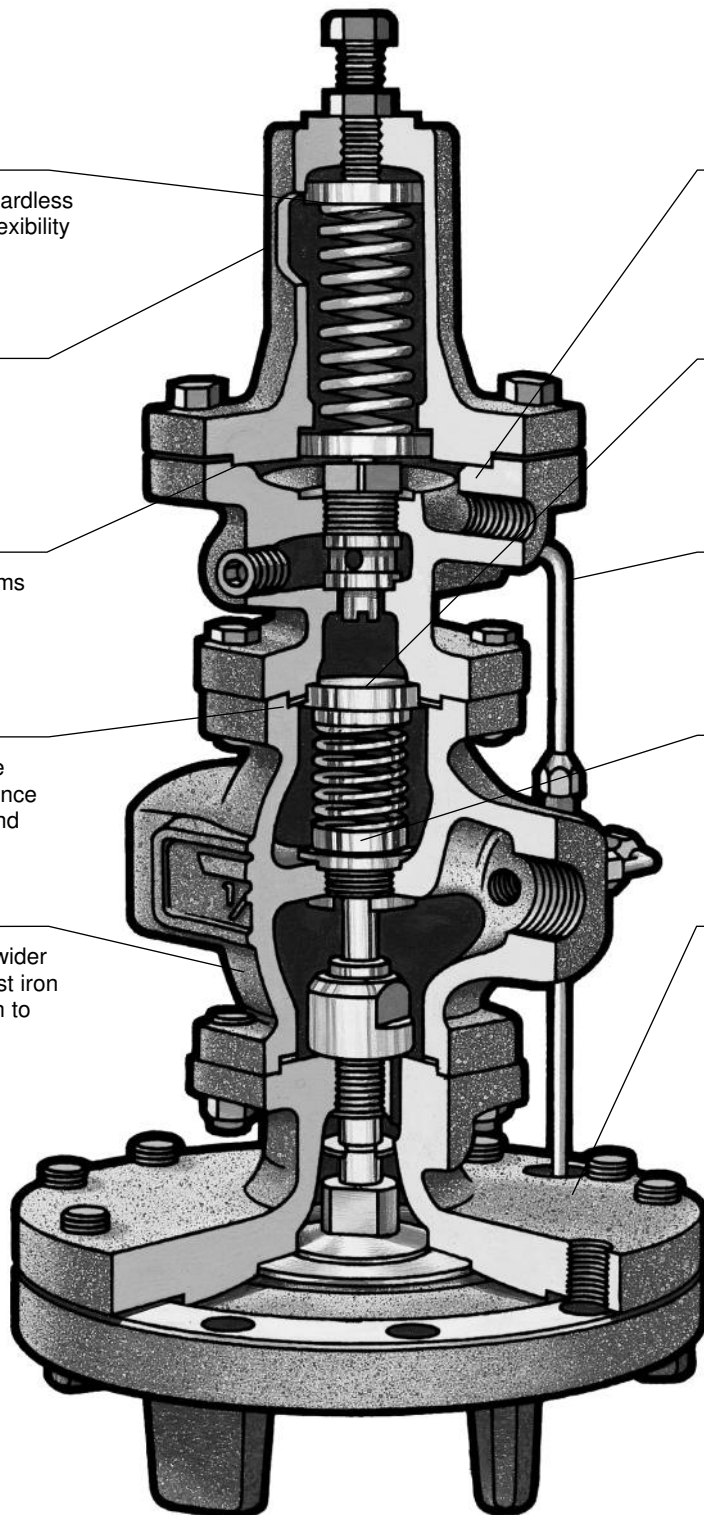
Available in both integral and remote mounted pilot.

Integral strainer protects the pilot valve from failure due to dirt.

Easily removable copper tubing permits troubleshooting while valve is in-line.

Easy access to main valve for quick inspection or maintenance by removing main valve spring and screen and lifting valve from stem. No special tools needed.

Design eliminates copper tubing from passing around the bottom diaphragm housing, minimizing chance of damage during shipping or installation.



## For Steam Service

The GP-2000 is a high performance, externally piloted reducing valve for large capacity requirements. Typical use is on intermittent service, including applications such as heat exchangers, steam coils, rotating dryers, process equipment and heating systems. With a 20:1 rangeability and high Cv, the

GP-2000 is reliable and accurate ( $\pm 1\%$  of pressure set point from 5% to 100% of flow) over a long, trouble-free service life. Hardened stainless steel working parts are renewable in-line. Single seated for dead-end service. Available with both BSPT ( $1/2'' - 2''$ ) and flanged connections in DN15 - DN150 sizes.

**Table PTC-229-1. GP-2000 Specifications**

Application	Inlet Pressure (barg)	Reduced Pressure (barg)	Spring Color	Maximum Temperature (°C)	Minimum Differential (barg)	Materials				
						Body	Main Valve /Seat	Pilot Valve / Seat	Diaphragm	Color
Steam	1 - 20	0,1 - 0,2*	Yellow	232	0,5	Ductile Iron ASTM A536	Stainless Steel AISI 420	Stainless Steel AISI 301	Dark Gray	
		0,2 - 1,5	Yellow							
		1 - 14	Green							

\* Note: When using this spring range, remove one (1) pilot diaphragm. Capacities are reduced by 1/2 of capacity chart when this spring is being used.

**Table PTC-229-2. GP-2000 Dimensions and Weights**

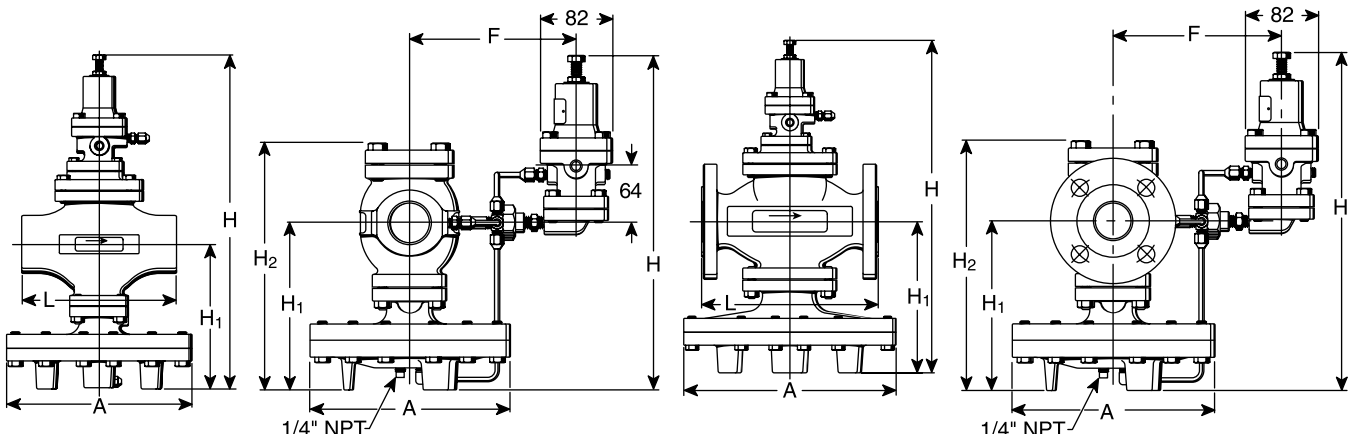
Size	Face-to-Face (L)		A	F	H Integral	H Remote	H <sub>1</sub>	H <sub>2</sub>	Weight		Cv
	BSPT	PN 25/40							BSPT	PN 25/40	
	mm	mm									
15 - 1/2"	150	150	200	176	398	362	170	244	14	16	5,0
20 - 3/4"	150	150	200	176	398	362	170	244	14	17	7,2
25 - 1"	160	160	226	180	404	367	175	254	19	23	10,9
32 - 1 1/4"	180	180	226	180	434	384	192	283	22	26	14,3
40 - 1 1/2"	180	200	226	180	434	384	192	283	22	26	18,8
50 - 2"	230	230	276	197	498	406	216	321	33	38	32,0
65 - 2 1/2"	-	290	352	211	552	440	251	375	-	67	60,0
80 - 3"	-	310	352	222	575	456	264	400	-	73	78,00
100 - 4"	-	350	401	240	658	511	321	489	-	114	120,0
150 - 6"	-	480	502	-	806	-	414	673	-	252	250,0

Shade indicates products that are CE Marked according to the PED (97/23/EC). All the other sizes comply with the Article 3.3 of the same directive.

Note: DN150 valve is available in integral version only.

For capacities see page PTC-231.

External Sensing Line is not included as standard, but could be delivered on request. Internal Sensing Kit is also available.



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.